L Number	Hits	Search Text	DB	Time stamp
1	254	loop with kernel	USPAT	2004/02/19 12:38
2	7	(loop with kernel) and (379/$.ccls. or 370/$.ccls. or 324/$.ccls.)	USPAT	2004/02/19 12:38
-	11370	user-defined or (user adj definded) or (user adj preference) or (user-preference)	USPAT	2004/02/19 12:37
-	1461	bill$3 with (statement or invoice)	USPAT	2004/02/18 12:13
-	224930	occurrence	USPAT	2004/02/18 12:14
-	64	sub-account or (sub adj account)	USPAT	2004/02/18 12:15
-	5	(user-defined or (user adj definded) or (user adj preference) or (user-preference)) same (bill$3 with (statement or invoice))	USPAT	2004/02/18 12:17
-	113	(user-defined or (user adj definded) or (user adj preference) or (user-preference)) and (bill$3 with (statement or invoice))	USPAT	2004/02/18 12:17
-	0	(sub-account or (sub adj account)) and (occurrence and ((user-defined or (user adj definded) or (user adj preference) or (user-preference)) and (bill$3 with (statement or invoice))))	USPAT	2004/02/18 12:17
-	63	occurrence and ((user-defined or (user adj definded) or (user adj preference) or (user-preference)) and (bill$3 with (statement or invoice)))	USPAT	2004/02/18 12:17
-	137	nguyen-duc.xa. and filter	USPAT	2004/02/19 08:19
-	30	(nguyen-duc.xa. and filter) and 379/$.ccls.	USPAT	2004/02/19 08:19
-	124	split$4 with (invoice or statement)	USPAT	2004/02/19 08:50
-	10	(split$4 with (invoice or statement)) and (379/$.ccls. or 705/$.ccls.)	USPAT	2004/02/19 08:51

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INTEGRAL TABLES

Basic Rules and Basic Integrals

Here are some fundamental integrals which help explain some basic operations widely used in working with integrals.

$$\int dx = x$$

$$\int a\, dx = ax$$

$$\int a \bullet f(x)\, dx = a\int f(x)\, dx$$

$$\int (u + v)\, dx = \int u\, dx + \int v\, dx$$

$$\int u\, dv = u\int dv - \int v\, du = uv - \int v\, du$$

$$\int \frac{1}{x}\, dx = \int x^{-1}\, dx = \ln(x)$$

$$\int x^n\, dx = \frac{x^{n+1}}{n+1} \quad ;\text{except } n = -1$$

$$\int e^x\, dx = e^x$$

$$\int e^{ax}\, dx = \frac{1}{a}e^{ax}$$

$$\int b^{ax}\, dx = \frac{1}{a\ln(b)}b^{ax} \qquad ;b > 0$$

$$\int \ln(x)\, dx = x\ln(x) - x$$

$$\int a^x \ln(a)\, dx = a^x \qquad ;a > 0$$

INTEGRAL TABLES

Logarithmic Forms

$$\int \ln(x)\,dx = x\ln(x) - x$$

$$\int x\ln(x)\,dx = \frac{x^2}{2}\ln(x) - \frac{x^2}{4}$$

$$\int x^2 \ln(x)\,dx = \frac{x^3}{3}\ln(ax) - \frac{x^3}{9}$$

$$\int x\ln(ax)\,dx = \frac{x^{n+1}}{n+1}\ln(ax) - \frac{x^{n+1}}{(n+1)^2}$$

$$\int \big(\ln(x)\big)^2\,dx = x\big(\ln(x)\big)^2 - 2x\ln(x) + 2x$$

INTEGRAL TABLES

Exponential Forms

$$\int e^x dx = e^x \qquad \int e^{-x} dx = -e^{-x}$$

$$\int e^{ax} dx = \frac{1}{a} e^{ax}$$

$$\int x e^{ax} dx = \frac{e^{ax}}{a^2}(ax - 1)$$

$$\int x^m e^{ax} dx = \frac{x^m e^{ax}}{a} - \frac{m}{a} \int x^{m-1} e^{ax} dx$$

$$\int \frac{1}{x} e^{ax} dx = \ln(x) + \frac{ax}{1!} + \frac{a^2 x^2}{2 \cdot 2!} + \frac{a^3 x^3}{3 \cdot 3!} + \frac{a^4 x^4}{4 \cdot 4!} + \cdots$$

$$\int x e^{-x^2} dx = -\frac{1}{2} e^{-x^2}$$